

2007 Sport Hunt Plan

on

MACKAY ISLAND NATIONAL WILDLIFE REFUGE
Knotts Island, NC

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I. Establishment:

Mackay Island National Wildlife Refuge is in Currituck County, North Carolina and Virginia Beach, Virginia. The Service named the refuge for Mackay Island where it is located, which is, in turn, named for John Mackie, who once owned the island. The approved acquisition boundary lies in Currituck County, North Carolina (population 18,190) and the city of Virginia Beach, Virginia. The southern end of the city of Virginia Beach, Virginia (population 425,257), lies at the northern end of the refuge; the closest developed area of the city lies 18 miles north of the refuge; the center of the city lies 27 miles north of the refuge. The center of the city of Chesapeake, Virginia (population 199,184), lies 27 miles northwest of the refuge and the center of the city of Norfolk, Virginia (population 234,403), lies 31 miles northwest of the refuge. The refuge covers a total of 8,219 acres and its western boundary is on the North Landing River just northeast of its outlet into the Currituck Sound and just south of Back Bay. This region is part of the physiographic area known as the South Atlantic Coastal Plain and the Fish and Wildlife Service administrative ecosystem known as the Roanoke-Tar-Neuse-Cape Fear Ecosystem.

Congress established the Mackay Island National Wildlife Refuge on December 30, 1960, by the authority of the Migratory Bird Conservation Act of 1929. The Service established the original acquisition boundary of 7,835 acres in 1961 and expanded the boundary to 9,503 acres in 1991. The Secretary of the Interior issued a proclamation on August 21, 1963, prohibiting waterfowl hunting on 4,621 acres of the refuge and 1,098 acres of water south and west of the refuge.

The purpose of Mackay Island National Wildlife Refuge, as reflected in the legislation under which Congress authorized the refuge and the refuge has acquired land, is to protect and conserve migratory birds, and other wildlife resources through the protection of wetlands, in accordance with the following laws:

...for use as an inviolate sanctuary, or for any other management purpose, for migratory birds... 16 U.S.C. Sec. 664 (Migratory Bird Conservation Act of 1929);

...for (1) incidental fish and wildlife-oriented recreational development, (2) the protection of natural resources, (3) the conservation of endangered species or threatened species... 16 U.S.C. Sec 460k-1 (Refuge Recreation Act of 1962).

National Wildlife Refuge System Mission: The mission of the Refuge System, as defined by the National Wildlife Refuge System Improvement Act of 1997, is:

... to administer a national network of lands and waters for the conservation, management, and where appropriate, restoration of the fish, wildlife and plant resources and their habitats within the United States for the benefit of present and future generations of Americans.

Additionally, the System was created to conserve fish, wildlife, and plants and their habitats and this conservation mission has been facilitated by providing Americans opportunities to participate in compatible wildlife-dependent recreation, including fishing and hunting, on System lands and to better appreciate the value of and need for fish and wildlife conservation.

II. CONFORMANCE WITH STATUTORY AUTHORITY

Mackay Island National Wildlife Refuge (NWR) was established “...for use as an inviolate sanctuary, or for any other management purpose, for migratory birds...” (16 U.S.C. Sec. 664; Migratory Bird Conservation Act of 1929) and “...for (1) incidental fish and wildlife-oriented recreational development, (2) the protection of natural resources, (3) the conservation of endangered species or threatened species...” (16 U.S.C. Sec k-1; Refuge Recreation Act of 1962).

The National Wildlife Refuge System Administration Act of 1966 as amended by the National Wildlife Refuge System Improvement Act of 1997 (16 U.S.C. 668dd et seq.) specifies hunting as a wildlife-dependent recreational use and the law states that as such, it “shall receive priority consideration in national wildlife refuge planning and management.” The Secretary of Interior may permit hunting on a refuge if he/she determines that such use is compatible with the refuge purpose for which it was established.

Public hunting on Mackay Island NWR is an acceptable and desirable form of wildlife oriented public recreation which is compatible with the purpose for which the refuge was established. Hunting, being a viable management tool when used wisely, often inhibits the overpopulation of species within a given habitat community and can provide for greater wildlife diversity. In this way the environment is preserved for the benefit of a variety of wildlife. The hunting program through spatial and temporal management is designed to minimize potential conflicts with Refuge purposes.

Other Applicable Laws, Regulations, and Policies:

Antiquities Act of 1906 (34 Stat. 225)
Migratory Bird Treaty Act of 1918 (15 U.S.C. 703-711; 40 Stat. 755)
Migratory Bird Conservation Act of 1929 (16 U.S.C. 715r; 45 Stat. 1222)
Migratory Bird Hunting Stamp Act of 1934 (16 U.S.C. 718-178h; 48 Stat. 451)
Criminal Code Provisions of 1940 (18 U.S.C. 41)
Bald and Golden Eagle Protection Act (16 U.S.C. 668-668d; 54 Stat. 250)
Refuge Trespass Act of June 25, 1948 (18 U.S.C. 41; 62 Stat. 686)
Fish and Wildlife Act of 1956 (16 U.S.C. 742a-742j; 70 Stat. 1119)
Refuge Recreation Act of 1962 (16 U.S.C. 460k-460k-4; 76 Stat. 653)
Wilderness Act (16 U.S.C. 1131; 78 Stat. 890)

Land and Water Conservation Fund Act of 1965
 National Historic Preservation Act of 1966, as amended (16 U.S.C. 470, et seq.; 80 Stat. 915)
 National Wildlife Refuge System Administration Act of 1966 (16 U.S.C. 668dd, 668ee; 80 Stat. 927)
 National Environmental Policy Act of 1969, NEPA (42 U.S.C. 4321, et seq; 83 Stat. 852)
 Use of Off-Road Vehicles on Public Lands (Executive Order 11644, as amended by Executive Order 10989)
 Endangered Species Act of 1973 (16 U.S.C. 1531 et seq; 87 Stat. 884)
 Refuge Revenue Sharing Act of 1935, as amended in 1978 (16 U.S.C. 715s; 92 Stat. 1319)
 National Wildlife Refuge Regulations for the Most Recent Fiscal Year (50 CFR Subchapter C; 43 CFR 3101.3-3)
 Emergency Wetlands Resources Act of 1986 (S.B. 740)
 North American Wetlands Conservation Act of 1990
 Food Security Act (Farm Bill) of 1990 as amended (HR 2100)
 The Property Clause of the U.S. Constitution Article IV 3, Clause 2
 The Commerce Clause of the U.S. Constitution Article 1, Section 8
 The National Wildlife Refuge System Improvement Act of 1997 (Public Law 105-57, USC668dd)
 Executive Order 12996, Management and General Public Use of the National Wildlife Refuge System, March 25, 1996
 Title 50, Code of Federal Regulations, Parts 25-33
 Archaeological Resources Protection Act of 1979
 Native American Graves Protection and Repatriation Act of 1990

III. STATEMENT OF GOALS

Wildlife, Fish, and Plant Populations: Preserve, protect, and maintain healthy and viable populations of migratory birds, wildlife, fish, and plants including federal and state endangered species and trust species.

Habitat: Restore, enhance, and maintain the natural processes and diversity of marsh habitats to insure optimum ecological productivity and protect the water quality in the Currituck Sound.

Public Use: Provide the public with safe, high quality wildlife dependent recreational and educational opportunities that focus on the wildlife and habitats of the refuge and the national wildlife refuge system.

Resource Protection: Protect refuge resources by limiting adverse impacts of human activities and development.

Administration: Acquire and manage adequate funding, human resources, facilities, equipment, and infrastructure to accomplish the other refuge goals.

The objectives of the refuge hunt program are as follows:

- 1) To ensure acceptable, compatible, and desirable forms of hunting experiences.
- 2) Maintain a public hunting opportunity that provides another use of a valuable renewable resource.

IV. ASSESSMENT

1. Compatibility with Refuge Objectives

Hunting is one of the six wildlife-oriented recreational uses prioritized by the Refuge Improvement Act of 1997. The Secretary of Interior may permit hunting on a refuge if he/she determines that such use is compatible with the refuge purpose for which it was established. The hunting program will not materially interfere with or detract from the fulfillment of the purposes of the Refuge or mission of the National Wildlife Refuge System.

2. Biological Soundness

Deer

Deer hunts have proven to be not only compatible with refuge objectives but also beneficial in meeting them. Deer harvest is essential to help maintain the herd at or below habitat carrying capacity. When deer are overpopulated, they over-browse their habitat and can completely change the species composition of a forest by doing so. The refuge has reforested areas with bottomland hardwood tree species. Tree seedling of this age (1-9 years old) can be killed by over-browsing. Failure to establish this bottomland hardwood forest will have significant negative impacts on future resident and migratory wildlife populations. Furthermore, overpopulation will also lead to devastating outbreaks of disease. Furthermore, overpopulation leads to starvation, increased car-deer collisions and poorer overall herd health.

Harvest and population survey data confirm that decades of deer hunting have not had a cumulative adverse effect on the deer population in the Albemarle Management Zone (AMZ) which is comprised of a six county area including and immediately adjacent to the refuge. The North Carolina Wildlife Resources Commission (NCWRC) estimates the average deer population in the AMZ from 1984 to 2005 to be 40,813 and the average annual harvest to be 5,273. Figure 3 below illustrates a steady to slightly increasing population size over this twenty-two year period of fairly steady harvest rates. These data indicate that the regulated hunting that occurred in the AMZ during this time frame did not have any negative cumulative impacts on the regional deer population. Extrapolating from this survey data, it is reasonable to assume that a similar relationship between population levels and harvest rates could be expected on the refuge. Based on

this assumption, the refuge deer population would not experience any cumulative negative impacts from the opening of the entire refuge to deer hunting.

Deer herd health checks are conducted approximately every 5 years on Mackay Island NWR by the Southeast Cooperative Wildlife Disease Study at the University of Georgia. In 2002, the health check report stated that "...the herd is near or possibly in excess of nutritional carrying capacity..." and "Any significant increase beyond current herd density can be expected to result in declines in herd health and higher rates of disease-induced mortality".

Migratory Birds (Waterfowl, Rails, Coots, Snipe, Dove)

Migratory bird hunting is not permitted on Mackay Island NWR at this time.

Small Game (Squirrel, Rabbit, Raccoon, Opossum, Coyote, Beaver and Quail)

Small game hunting is not permitted on Mackay Island NWR at this time.

3. Economic Feasibility

Annual hunt administration costs including salary, equipment, waterfowl boundary and sign maintenance, fuel, etc. total approximately \$10,000. Less than 1.0 full time staff equivalent is expended in conducting hunt-related activities. Funds are available to meet the conditions set forth in the Refuge Recreation Act. It is anticipated that funding will continue to be sufficient to continue the hunting program in the future.

4. Relationship with other Refuge Programs

The proposed hunt does not offer significant conflicts with other hunts or with non-consumptive users. However, non-consumptive users are not permitted to use the refuge during the hunting season. This closure of the public use areas will be up to but not exceed 20 days during the deer hunting season. During the peak waterfowl season deer hunting is further limited by closing those portions of the refuge with the highest waterfowl use rates to provide sanctuary for the wintering birds.

5. Recreational Opportunity

The purpose of the white-tailed deer hunting program outlined in this plan is to provide a quality wildlife-dependent recreational experience that conforms with the guidance set forth in the National Wildlife Refuge System Improvement Act of 1997.

V. DESCRIPTION OF HUNTING PROGRAM

Description of Hunting Program

1. North Carolina

Seasons and bag limits will be within the guidelines established by the North Carolina Wildlife Resources Commission, but will be more conservative in general to assure compatibility with other refuge objectives. Refuge hunts will consist of shotgun, muzzle loading rifles/shotguns, and bow hunting for white-tailed deer only.

The hunting program will fall within the seasonal framework established by the North Carolina Wildlife Resources Commission. The refuge hunting program will be reviewed annually and amended as needed.

2. Virginia

Seasons and bag limits will be within the guidelines established by the Virginia Department of Game and Inland Fisheries, but will be more conservative in general to assure compatibility with other refuge objectives. Refuge hunts will consist of shotgun, muzzle loading rifles/shotguns, and bow hunting for white-tailed deer only.

The hunting program will fall within the seasonal framework established by the Virginia Department of Game and Inland Fisheries. The refuge hunting program will be reviewed annually and amended as needed.

VI. MEASURES TAKEN TO AVOID CONFLICTS WITH OTHER MANAGEMENT OBJECTIVES

A. Biological Conflicts

Refer to the Decision Document Package, Section 7 Evaluation.

A bald eagle (*Haliaeetus leucocephalus*) nest is located in the pine stand to the west of Canal Road and east side of Middle Pool. Increased Bald Eagle activity is usually observed in the vicinity of the nest from late December through the nesting and fledging period in May. The nesting season usually does not start until January, well after hunting season has ended. The area around the nest is closed to hunting December 1. Refuge staff will monitor the nest to ensure that Bald Eagles are not affected by the deer hunt and to evaluate nest success.

B. Public Use Conflicts

The proposed hunt does not offer significant conflicts with other hunts or with non-consumptive users. However, non-consumptive users are not permitted to use the refuge

during the hunting season. This closure of the public use areas will be up to but not exceed 20 days during the deer hunting season.

C. Administrative Conflicts

The manpower and funding available to administer this hunt is adequate so long as there are no reductions in current assets. Presently, little labor intensive data is collected during the hunts. The hunt regulations and bag limits will be in accordance with those set by the state. Special regulations, including hunt dates and hours, will be kept to a minimum to avoid excessive administrative procedures. All regulations will be published in a refuge brochure publication.

VII. CONDUCT OF THE HUNT

A. Refuge Specific Hunt Regulations

1. North Carolina

Hunting of white-tailed deer is allowed on designated areas of the Refuge in accordance with State and Federal regulations subject to the following conditions:

1. A Refuge Deer Hunting Permit that hunters must sign and carry is required while hunting on the Refuge.
2. Only the use of shotguns, muzzle loading rifles/shotguns, and bows are allowed while hunting on the Refuge. The use of all other types of firearms is prohibited.
3. Hunter access to the Refuge is allowed from 5 a.m. until 8 p.m.
4. Carrying a loaded firearm on or within 50 feet (15m) of gravel roads is prohibited.
5. The marking of trees or vegetation with blazes, flagging, or other marking devices is prohibited.
6. The area around the visitor center/refuge headquarters and the loop trail will remain closed to all hunting activity.

2. Virginia

Hunting of white-tailed deer is allowed on designated areas of the Refuge in accordance with State and Federal regulations subject to the following conditions:

1. A Refuge Deer Hunting Permit that hunters must sign and carry is required

while hunting on the Refuge.

2. Only the use of shotguns, muzzle loading rifles/shotguns, and bows are allowed while hunting on the Refuge. The use of all other types of firearms is prohibited.
3. Hunter access to the Refuge is allowed from 5 a.m. until 8 p.m.
4. Carrying a loaded firearm on or within 50 feet (15m) of gravel roads is prohibited.
5. The marking of trees or vegetation with blazes, flagging, or other marking devices is prohibited.

B. Anticipated Public Reaction to the Hunt

Public reaction to the proposed hunt has been be favorable. In this portion of North Carolina and Virginia around the Currituck Sound, limited public hunting opportunities currently exist except for those offered at a few public management areas.

Generally, the local public desires more hunting on refuges. Public reaction from surrounding communities to all refuge hunts has been very favorable and should continue to be the same in the future. Nationally, there are some anti-hunting sentiments, and many organizations are opposed to hunting on national wildlife refuges. It is possible that some objections may be voiced to the hunt presented within this plan.

C. Hunter Application Procedures

Refuge specific hunt brochures may be obtained, free of charge, by contacting the refuge headquarters or visiting one of several public kiosks.

D. Description of Hunter Selection Process

The refuge white-tailed deer hunt is a general hunt, no special selection is required.

E. Media Selection for Publicizing the Hunt

News Releases will be submitted to newspapers in North Carolina and Virginia. Additionally, refuge contact information is listed in the North Carolina Inland Fishing, Hunting, and Trapping Regulations Digest. Specific information regarding the Mackay Island National Wildlife Refuge Deer Hunting program can be found on the internet at <http://www.fws.gov/southeast/pubs/mckhnt.pdf>.

F. Description of Hunter Orientation

No specific effort is made toward hunter orientation other than above-mentioned media coverage, brochures and personal contacts. Pre-hunt scouting is allowed since non-

consumptive wildlife observation is open year round. However, refuge personnel are present to open the gate each morning before the hunts. Questions are welcomed and answered accordingly.

G. Hunter Requirements

(1) Age: State regulations apply.

(2) Allowable equipment: Boats, bicycles, and deer stands. Personal property must be removed at the end of each day's hunt. Vehicles are restricted to designated public use roads. Weapons are allowed during open hunting season and are limited to shotgun or muzzleloading rifle/shotgun.

(3) Permit: All hunters must carry the signed signature portion of the current Mackay Island National Wildlife Refuge Deer Hunting Regulations and Permit. The current Mackay Island National Wildlife Refuge Deer Hunting Regulations and Permit may be downloaded at <http://www.fws.gov/southeast/pubs/mckhnt.pdf>.

(4) Bag limits: State Regulations apply